Letter to Editor

Subciliary skin-muscle flap approach in patients with orbital fractures

Selection of a suitable incision for orbital floor and medial wall fractures is one of the challenging problems in plastic surgery. Subciliary, subtarsal, and transconjunctival incisions have been employed to approach the orbital floor fractures. Each of these approaches has its advantages and disadvantages that may make it more or less appealing to use. The lower eyelid skin-muscle flap is now widely used for cosmetic blepharoplasty, primarily because of the ease and speed of dissection it offers. The main disadvantages are ectropion and scleral show. We have used the same technique as a surgical approach in fractures of the orbital floor and rim. Fifty-two patients (48 male and 4 female, 61 eyelids) with mean age of 29 years (range, 15-67 years) with orbital trauma who were approached by steplike subciliary skin incision were reviewed. These patients were evaluated according to the causes of fractures, kind and number of incisions, and complications of skin-muscle incision. Patients with soft tissue laceration of the infraorbital region due to direct trauma were excluded from the study. The follow-up period varied from one to four years with an average of two years. Postoperatively, results and complications such as hematoma, infection, skin necrosis, visible scar and scleral show were evaluated. The main cause of trauma was car accident (50%). Subciliary skin incision was used in all patients. It was done alone or with other incisions such as Dingman, buccogingival sulcus and coronal. There were no postoperative complications such as hematoma, visible scar or skin necrosis. Six patients (12%) were seen with scleral show (1-2 mm). These patients were treated with massage, exercise of orbicularis muscle and warm compress with the good results. Whitaker has stated that 10% is the incidence of scleral show and ectropion after this incision but, there is no data available in regards to the percentage of operations necessary to be corrected. One of the six patients who had direct trauma to orbital rim and contusion of soft tissue, after 6 months of medical therapy, was reoperated for correction of lid contraction (1.6%). In conclusion, this incision seems to be a suitable method for exposure of orbital rim and floor fractures especially in cases without direct trauma to the infraorbital rim. However, it can be combined with other surgical incisions to provide wide exposure of the zygoma, and maxilla for the repair of more complex midfacial fractures.

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